Attack on Blob: Mega Multiply

(Tentative title)

Renegadeware

V 1.0.0

# Table of Contents

(fill after)

# Game Overview

## Target Learning Objective

## [4.NBT.B.5 – Multiply Four by One and Two by Two Digit Numbers](https://drive.google.com/file/d/1f6soq0DJodacNKyBln6oD8dmowyJS9B8/view)

## Demographics

* Ages 8-11

## Genre, Theme, and Setting

* Arcade-Puzzle game with a scoring/grading system on how efficient and well (based on no. of mistakes) the player performs.
* Earth is in grave danger as space blobs have appeared (once more) in the night sky. Bigger and fatter than ever, these interstellar menaces have blotted the sky. Fast approaching, the player must banish them with the many secret techniques of multiplying large numbers.
* The game takes place in view of the starry night, with out of this world (literally) visuals to indicate the alien nature of the blobs (think the 70’s colorful-scheme and wavey-flow patterns).
* These blobs have a nonchalant look about them, sometimes with mirth, regardless of their own predicament.

## Core Gameplay

The game is broken down into two parts: lesson and blob banishment. Each lesson will introduce a concept on how to handle multiplying certain number of digits in the multiplication, and then followed by the blob banishment that puts those lessons into practice.

### Lesson

This is mostly non-interactive with explanation on how to deal with multiplying a certain number of digits on each factor. There will be a basic interactive tutorial on how to banish blobs, and using distributive principle (via area visual) to input the correct answer. Another basic interactive tutorial will be introduced later to deal with multiplying two by two-digit numbers.

Once all the lessons have been completed, the player can click on the “next” button to proceed to blob banishment. (Lesson archives could also be put here for player to review).

### Blob Banishment

During blob banishment, the player is tasked with creating a “cleansing” blob that will eradicate a pair of blobs, until all of them are banished.

The gameplay goes as follows:

* 4 blobs are spawned in an enclosed circular board. Two large distinct blobs, and two smaller distinct blobs. Each blob displays a number inside them.
* The player connects a large blob to a small blob by dragging the mouse from one to the other. The player can only connect a large to a small blob (and vice versa). There will be a highlight on which blobs can be connected while dragging.
* Once two blobs are connected, the attack commences via a user interface with the following phases:

1. Distributive – describe.
2. Evaluate – describe.
3. Summation – asd.

* Once the player successfully completes the attack, a banish blob will appear on the board with the correct product value of the previously connected blob factors.
* The banish blob will automatically connect with the paired blobs, and all three of them will vanish.
* A combo counter will appear on the screen (or incremented if it appeared previously), the whole operation will be displayed at the top as a toast-notification, and the score is updated. (Note: Combo system is described in detail in gameflow).
* Two more will appear, and the round counter is decremented. Repeat from connecting blobs until round counter is 0.
* Victory fanfare, and then a summary UI is shown with scores on each category of the player’s performance (detailed later), along with a grade. (Note: could also put a retry here if they got a low grade).
* Player clicks on the “next” button to proceed to the next lesson.

## Look and Feel

* 70’s color-scheme and wavey-flow patterns as backdrops, along with a starry night sky during blob banishment.
* Soothing animated background during lessons, with a reassuring robot that explains the lesson.
* Non-menacing, happy-go-lucky blobs with a simple beady-eye, along with a line-mouth showing expressions depending on the situation: happy, nonchalant, worried, joy. Distinct look for large and small blob to distinguish who can pair with who.

Examples of these can be seen from a previous game – Attack on Blob: Multiply and Divide.

(show screens from Attack on Blob)

## Target Platform

* **WebGL with iPad support (iPad 6)** – The game will be completely mouse/touch driven, with the option to use the numpad/numbers from the keyboard when filling in the numbers.

# Game Flow